REMARKS

The claims are rejected in view of ALPERT (U.S. Patent 5,621,886), a MIPS reference (MIPS64 5Kc™ Processor Core Datasheet), and LINDSEY (U.S. Patent 5,870,606). The independent claims are amended to more fully distinguish over the prior art of record. Reconsideration of the rejection in view of the foregoing amendments and the following remarks is respectfully requested.

Independent claim 1 is amended to recite the operation of "transmitting to said trace memory synchronization information including processor mode values and ASID values". Support for this amendment may be found in paragraph [1067] among other places.

Independent claim 1 is also amended to recite that the trace regeneration software is applied to "said synchronization information." Support for this amendment may be found in paragraph [1067] among other places.

The foregoing amendments fully distinguish claim 1 over the prior art of record. The MIPS reference describes JTAG Debug Support, which is a dynamic or interactive operation performed by a user. In other words, a user dynamically works in a debug mode. Thus, there is no trace memory, since all operations are performed dynamically. In addition, there is no need to transmit synchronization information including processor mode values and ASID values to a trace memory since all debugging is performed in a dynamic mode. Thus, the MIPS reference fails to show or suggest the limitations of amended claim 1.

Similarly, ALPERT discloses dynamic or interactive debug operations. For example, ALPERT states at column 5, lines 1-6: "This document describes an invention allowing for the separate enablement of debug events during the execution of operating system routines and non-operating system routines. This allows programmers the flexibility of selectively enabling debug events during the execution of either handlers, or applications, or both." ALPERT performs debug operations while a current process is suspended (see, for example, Figure 2).

Thus, ALPERT is a dynamic system with no need for a trace memory. Since ALPERT operates dynamically and does not have a trace memory, the patent does not show or suggest transmitting "to said trace memory synchronization information including processor mode values and ASID values", as currently claimed. Accordingly, ALPERT fails to show or suggest the limitations of amended claim 1.

The Examiner points to LINDSEY for teaching that trace information can be utilized after execution of a task. LINDSEY provides no information on synchronization of trace

information. In particular, LINDSEY fails to show or suggest "transmitting to said trace memory synchronization information including processor mode values and ASID values", as currently claimed. Thus, LINDSEY also fails to show or suggest the limitations of amended claim 1.

In sum, MIPS, ALPERT, and LINDSEY individually and in combination fail to show or suggest the limitations of amended claim 1. Therefore, claim 1 should be in a condition for allowance. Claims 3, 5-6, and 10 are dependent upon claim 1 and therefore should also be in a condition for allowance. Claim 5 is amended to recite four separate processor modes. The prior art of record fails to show or suggest the claimed processor modes in combination with the elements of claim 1. Claim 10 includes a number of limitations that are not shown or suggested by the prior art of record. The Examiner's rejection of this claim is completely inadequate as it fails to cite detailed teachings corresponding to the detailed elements of the claim. The Examiner is obligated to show where each element of the claim is shown or suggested in the prior art. The Examiner has not provided a per element comparison with the prior art and therefore the rejection is inappropriate.

The remaining independent claims are amended to include limitations of the type incorporated into claim 1. Thus, each patentability argument with respect to claim 1 is equally applicable to the remaining independent claims. Accordingly, claims 11, 21, 22, and 24 should also be in a condition for allowance, as should dependent claims 13, 15-16, 20, and 23.

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is now in condition for allowance. The Examiner is invited to contact the undersigned if there are any residual issues that can be resolved through a telephone call.

The Commissioner is hereby authorized to charge any appropriate fees to Deposit Account No. 03-3117.

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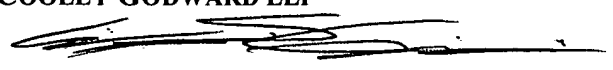
Respectfully submitted,
COOLEY GODWARD LLP



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